

24th MEU ACE ***Operational Philosophy*** ***&*** ***Institutional ORM***

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Aviation Combat Element, 24th MEU

09/11/16

OPNAVINST 3500.39B
MCO 3500.27A

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Why the ACE exists...

***In general, we support the MAGTF;
specifically***

***We support the Ground Combat
Element,***

We train and prepare for war,

We fight and we win,

***We return home victorious - and with
honor!***

Ensuring Mission Accomplishment

“Operational Excellence”

Our motto: “Second to None”

**Our goal: “Unparalleled
support**

**- on time,
on target”**

***Mission success also
depends on the preservation
of all our assets while
safeguarding our people who
are our most precious
resource***

The greatest variable in aviation is human performance. The systems of rules, regulations, and programs which glue aviation together form the structure with which we reduce the variability to acceptable levels

Our Military Culture...

has

- *challenges* We can do anything, anywhere, anytime, at any cost
- Inbred reluctance (institutional bias) to say “no”
- Making decisions based on the way we’ve always done it
- Letting ‘somebody else’ worry about mission hazards
- The rules don’t apply when we get to combat

Organizational and Supervisory Factors

- Underlying latent causal factors

- Unhealthy command climate
- Poor safety culture
- Inability to learn from indicators and mistakes
- Failure to enforce all standards
- False sense of urgency
- Lousy decision making
- Undisciplined operations



Behavior is the result of the culture you live in

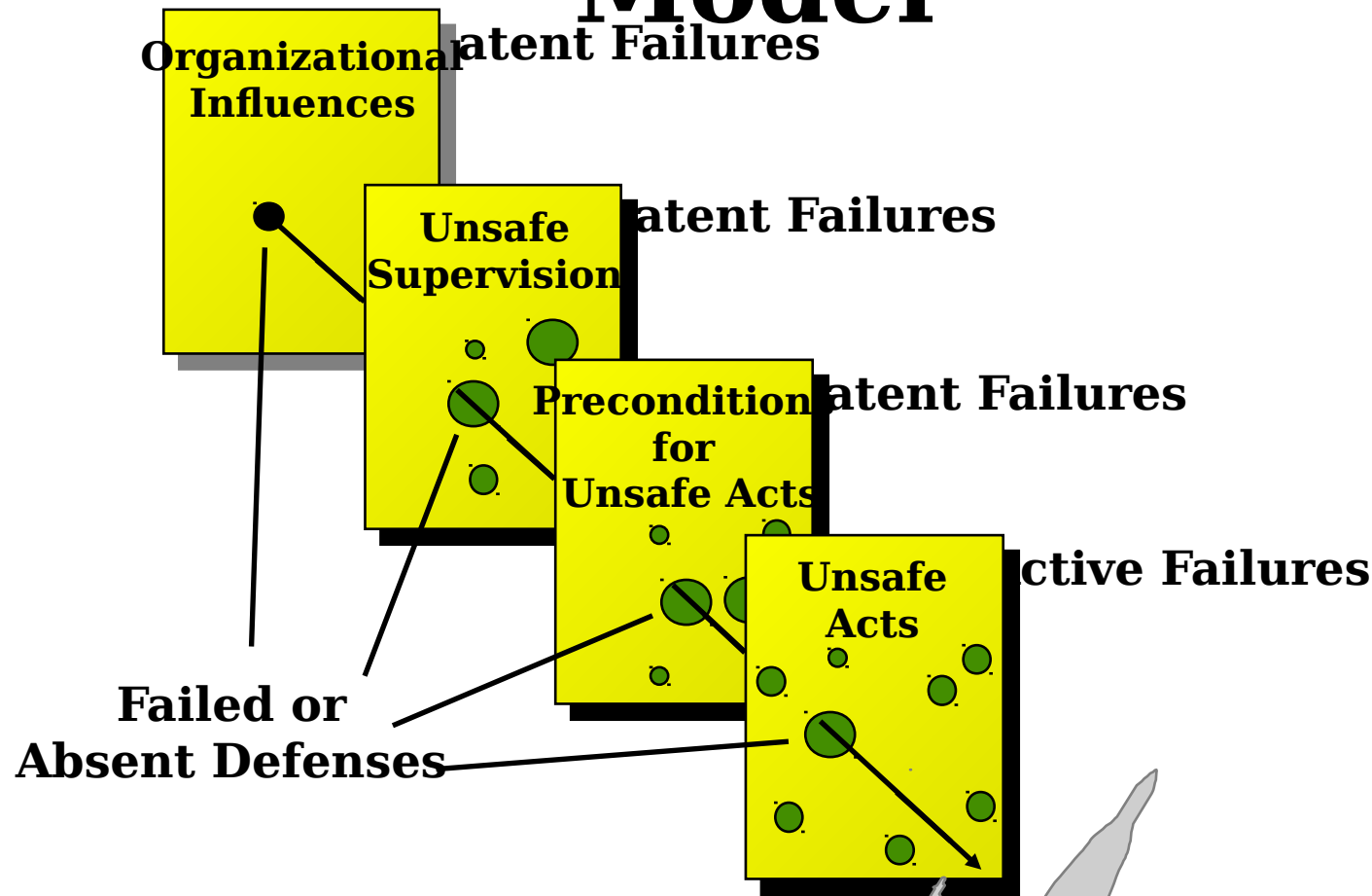
Individual Human Factors

- **Overzealousness**
- **Complacency**
- **Lethargy**
- **Forgetfulness**
- **Anxiety**
- **Assumption**



Knowledge, training, culture, and discipline are our

Link Analysis - Reason's 1990 Model



Mission accomplishment requires us to be professional in the planning and execution of every task. A good safety is a byproduct of our professionalism.

‘Operationalizing’ Safety

- **Knowledge base**
- **Attention to detail**
- **Thorough and progressive training**
- **100% adherence to rules, regulations, and standards**
- **Fidelity and accountability**
- **Wargaming and oversight**
- **Authority to use the “King’s X” - if it doesn’t look right, feel right, smell right stop the show and sort it out**

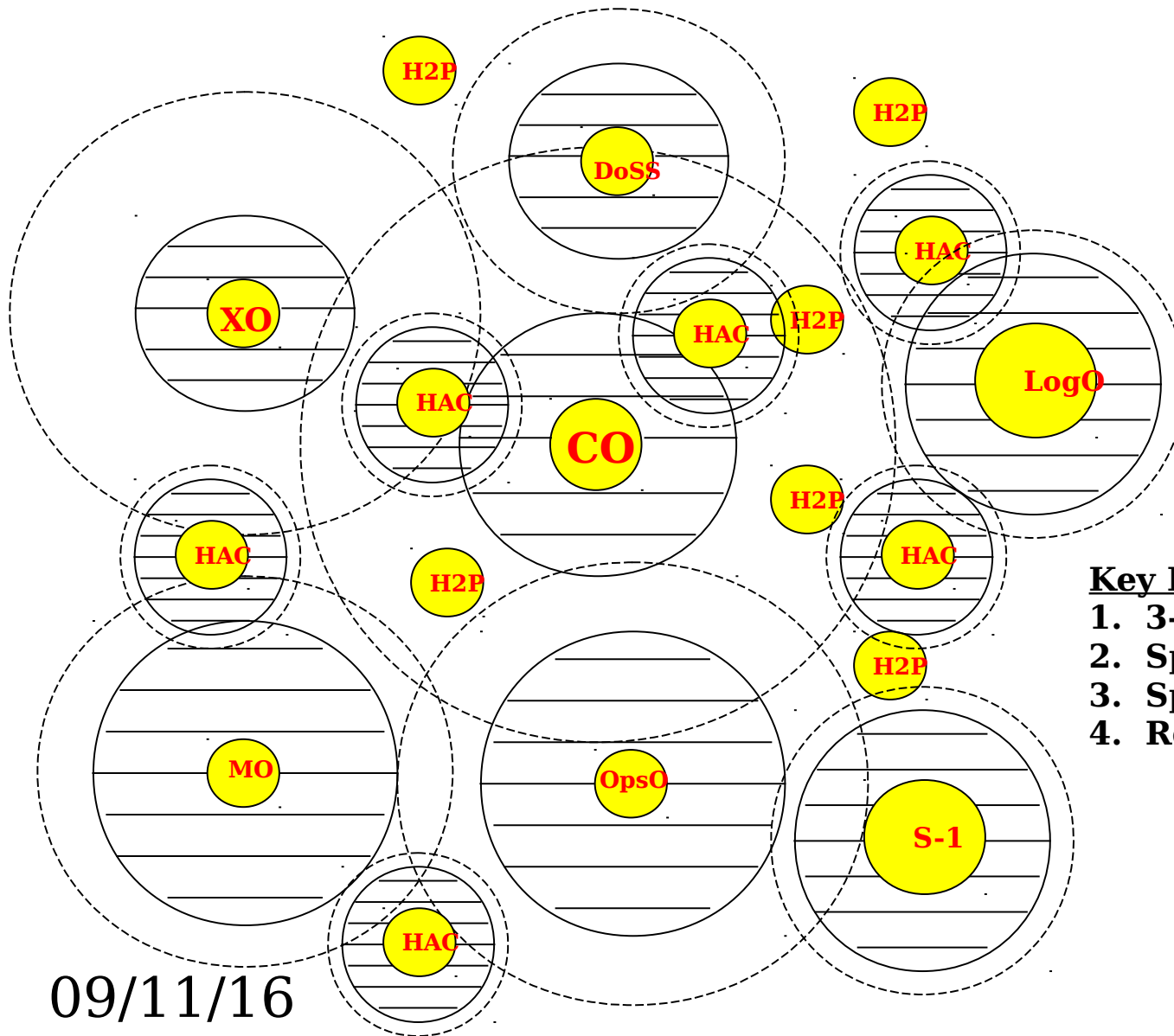
**How do we ensure that
we are
'Operationalizing'
Safety?**

**Through the use of
Institutional ORM**

Assumptions

- **Squadron operational oversight [including safety of flight issues] have often been affected to the greatest extent by the most senior proactive and influential personnel (e.i. OpsO, CO, DoSS, and select Majors and Captains)**
 - Squadron dynamics too are most affected by the strengths of these key personnel
- **In many cases squadron processes focus largely on program management and reporting vice an institutional program of checks and balances with the primary goal of mission accomplishment and zero mishaps**

Barr's Squadron Dynamics Model



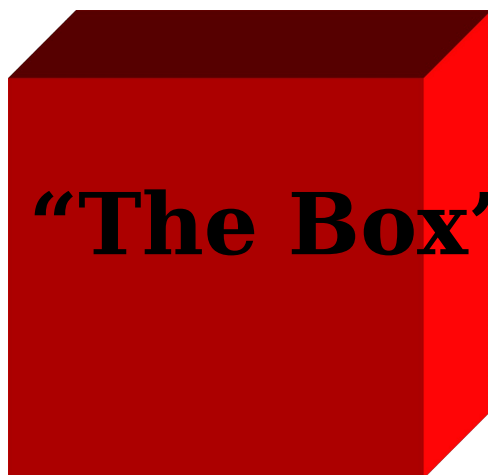
Key Points

1. 3-D dynamic motion
2. Sphere of observation
3. Sphere of influence
4. Relative ability to act

“The Box” defined

CO’s Safety Program and Standard Operations Procedures

**OPNAV
NATOPS
T&R
ANTTPs**



**Tactical acumen
Professionalism
Good decision making
and common sense**

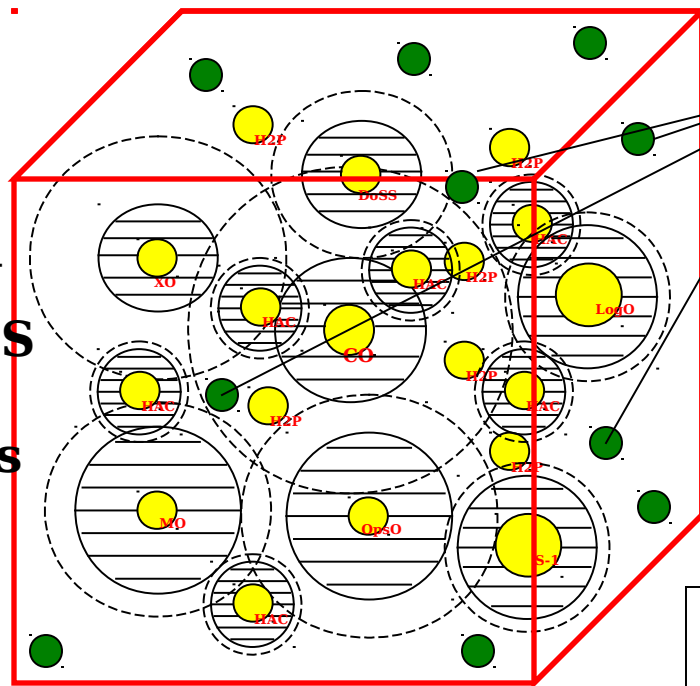
**Operational
Risk
Management**

***You will plan all operations in the center of the box
- no box expanding drills are authorized***

09/11/16

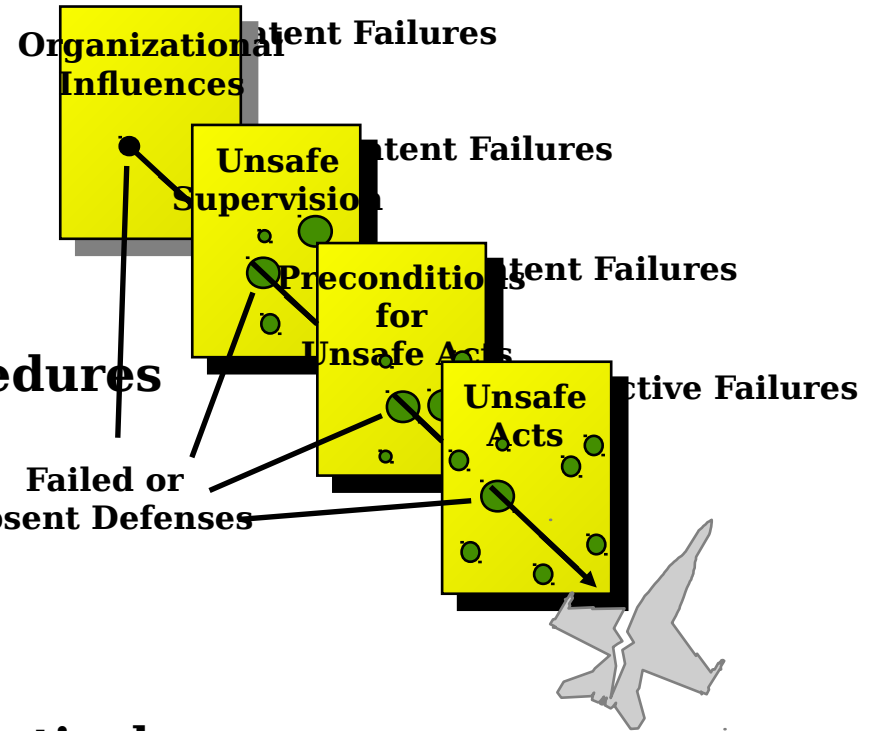
Link Analysis - Reason's 1990 Model

CO's Safety Program and Standard Operations Procedures



**Operational
Risk**

09/11/16 Management



**Failed or
Absent Defenses**

**Tactical acumen
Professionalism
Good decision making
and common sense**

Our key personnel cannot be everywhere at once, nor can they see and affect everything - we need a system of checks and balances to provide homogenous institutional oversight - Institutional ORM

Where is that cohesive system of systems of rules, regulations, and programs which glue aviation together form the structure with which we reduce the variability to acceptable levels?

– *Institutional ORM*

Operational Risk

Management

Approach

and Integration Strategy *ORM is our #1 Tool..*

1. Top-down application
2. Strong Command backing
3. Decentralized implementation
4. Application down to the most basic levels
5. Standardized process

Operational Risk

Management

& Processes

Four Principles

1. Accept risk when benefits outweigh the cost
2. Accept no unnecessary risks
3. Anticipate and manage risk by planning
4. Make risk decisions at the right level

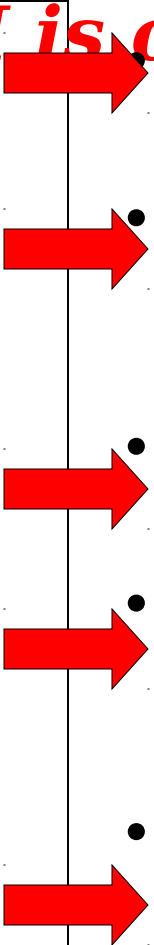
Principles
ORM is our #1 Tool..

Five-Step Process

1. Identify Hazards
2. Assess Hazards (severity/probability)
3. Make Risk Decisions
4. Implement Controls
5. Supervise (watch for changes)

Operational Risk Management

ORM is our #1 Tool...

- Conduct a detailed mission analysis
 - Develop COAs, the COE, and wargame the mission (and threats)
 - Develop a plan for Mission success
 - Build in a margin of safety to mitigate the risks
 - Make the right decisions at the right levels
- 
- Identify Hazards
 - Access Hazards
- Severity/Probability
 - Make Risk Decisions
 - Implement Controls
 - Supervise (watch for changes)

Hazard Detection

Hazards, synonymous with mishap causal factors, may exist as a result of poor design, improper/unprofessional work or operational practices, inadequate instructions or publication, or because the environment is demanding and unforgiving.

Hazards can be detected during every phase of a mission from planning through execution.

Hazard Elimination

The keys to effective hazard elimination are knowledge of required procedures and rep instructions, proper use of materials and e and safety awareness

Hazards must be mitigated and eliminated of the way

24th MEU ACE -

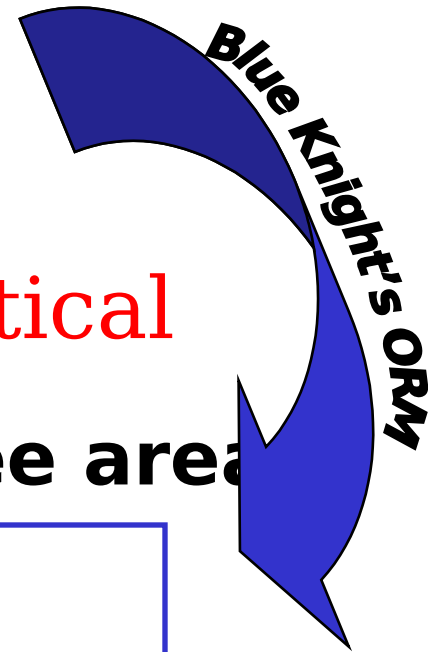
Institutional ORM

Three levels of ORM

- Long Term – In-Depth
- Mid Term – Deliberate
- Short Term – Time Critical

Operationalized in three areas

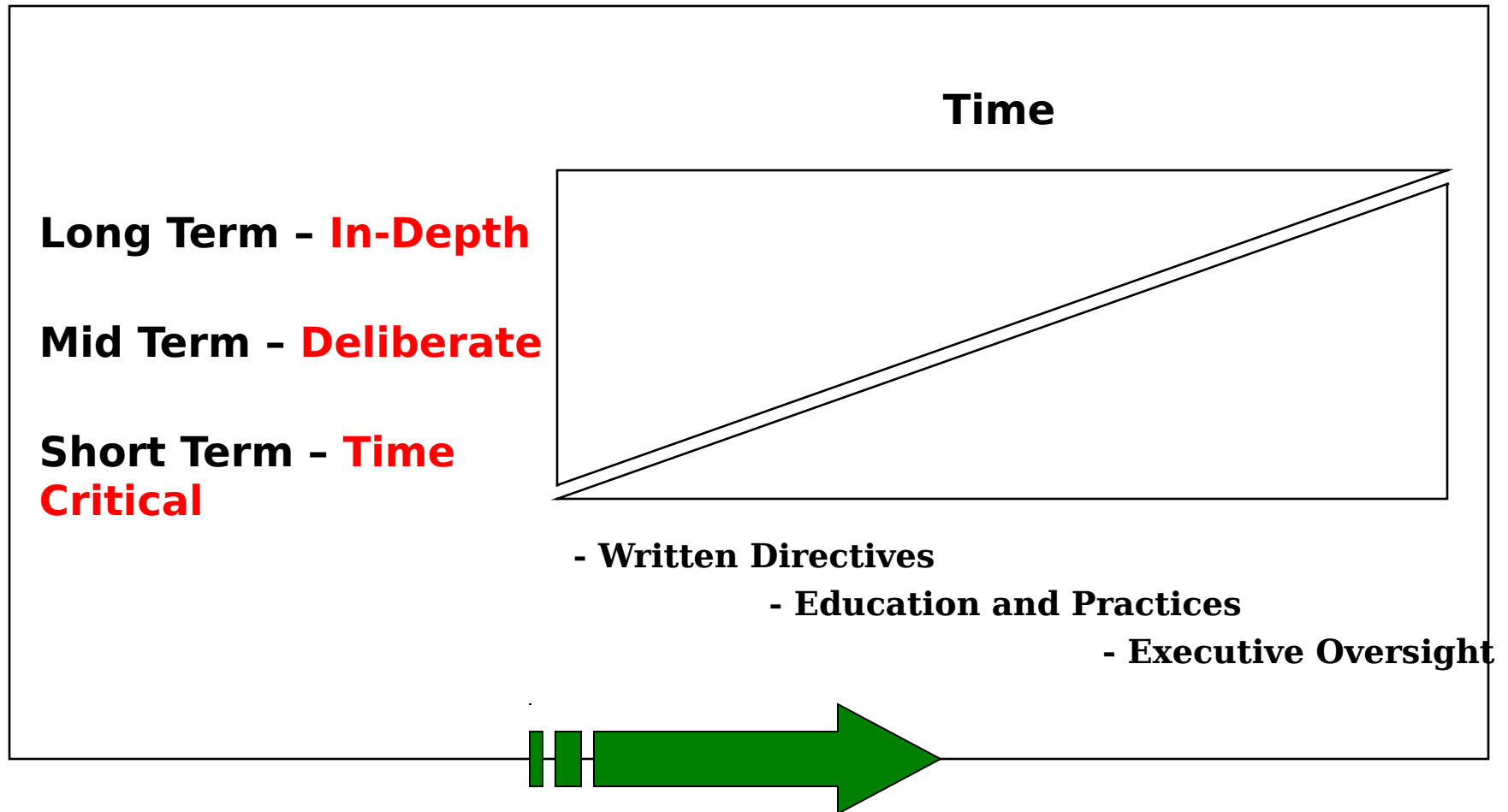
- Written Directives
- Education and Practices
- Executive Oversight



Focus

- **“Actions in the objective area”**
 - A literal industry term
 - A metaphor capturing both tactical as well as administrative critical success points
 - Distillation of the key elements
 - Holistic approach inclusive of all aspects of the employment of the ACE
 - From movement plans to mission planning and briefings, as well as off duty incident prevention, etc.
 - Hazards and risks are identified and measures taken to ensure mission accomplishment

ORM - Relationship to Time

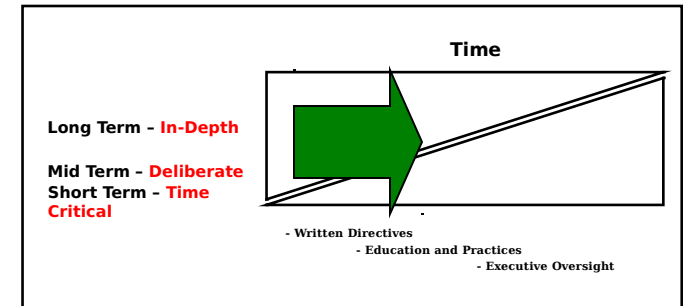


Long Term - In-Depth

Written Directives

- DoD and HQMC Safety and ORM Policies
- OPNAVINST, NATOPS, ANTPPs
- Training and Readiness (T&R) Manual
- Mission Essential Task List (METL)
- MAWTS-1 Course Catalogue
- Commanding Officer's Guidebook
- Squadron Standard Operating Procedures (SOPs)
- Pre-deployment Training Plan (PTP)
- Operations Department Aviation Monthly Training Plan
- Operations Department Aviation Weekly Training Plan
- Maintenance Training Plans
- Department of Safety and Standardization (DSS) 30/60/90 Plan
- Letters of Instruction (LOIs)
- Fragmentary (FRAG) Orders and handouts for all major evolutions
- Squadron Pilot and Aircrew Training Syllabi
 - *Rugby University*
 - **Progressive vice cyclic training plans**
- Learning objectives for T&R Phases and major training evolutions
- Master Scenario Events List (MSEL)
- SARA

Institutional procedures and practices founded in written directives

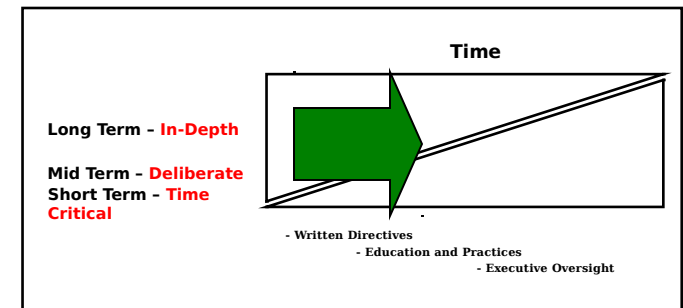


Long Term - In-Depth

Education and Practices

- **Formal Schools**
 - Aviation Safety Officers School
 - Aviation Safety Command Course
 - HCMC Commanders' Course
 - Operational Risk Management
 - SARA instruction and supervised employment
 - ORM instruction and supervised employment
- **MAWTS-1 Academic Support Package**
- **Rugby University** - initial and continuing education
- **Progressive vice cyclic training plans**
- **Tactical Decision Games (TDGs)**
- **Briefing of Serious Incident Reports and Hazard Reports**
- **"I was there" stories during All Officer's Meetings (AOMs)**
- **"Best Safety Practices" - 2 minute lesson learned during every maintenance shift changeover**
- **Focused Professional Military Education (PME) program**
- **Human Factors Analysis and Classification System (HFACS) review and application**

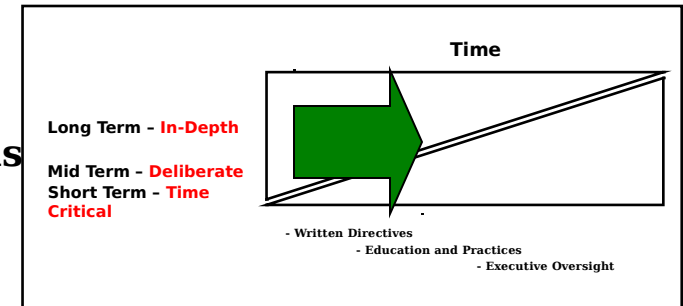
Institutional procedures underscored by education and practice



Long Term - In Depth

Executive Oversight

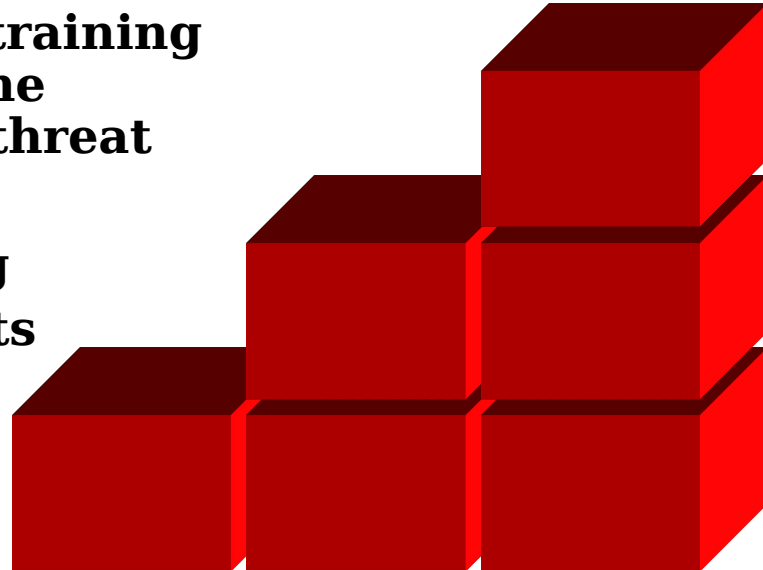
- Higher Headquarters inspection of all programs
- Standardization Board
 - Tactics Board
 - Pilot/Aircrew Training Board
- Human Factors Council/Human Factors Board
- Committees established for all major evolutions
 - Officer In Charge appointed
 - Initial, Main, Final Planning Conferences through evolution execution
- Wargaming and Crosswalk conferences
- *White Hat* meetings
- *Guardian Angel* oversight
- Everything goes through the Operations Department
- **Progressive vice cyclic training plans**
- CO decision/approval process inculcated



Institutional procedures practiced and enforced throughout

Progressive Vice Cyclic Training

- **Identifying the holistic training requirement based on the mission profile and the threat**
- **Academic training**
- **Hands-on static training**
- **Stair-step training flights**
- **Tactical Missions**
 - **Planning**
 - **Briefing**
 - **Execution**
 - **Debriefing**
- **Re-assess; re-attack or move to the next phase of training**



Mission oriented: crawl, walk, run - building block approach

Progressive Vice Cyclic Training Plan

1. Mission Analysis Conducted: Credible Air and Ground Threat to Aviation

2. Teach Classes on the most likely threat to be encountered; Ground, Rotary Wing, Fixed Wing

Ground Threat

(ZSU-23-4 & Gun Dish RADAR, SA-8 & Land Role RADAR, SA-7)

Rotary Wing Threat

MI-8, MI-24 and associated Air to Air Weapons Systems

Fixed Wing Threat

SU-23 and associated Air to Air Weapons Systems

This is a
CH-46E example,
but the same
methodology
applies to all
communities.

3. Dissect all primary and associated threat systems and determine what each particular system employs against helicopters. Know how we will identify if it is out there

(APR-39, AH-1W LASER Detection Set, visual, etc).

Know how the system is commonly employed (autonomous or within an integrated air defense system)

4. Teach all CH-46E Aircraft Survivability Equipment (ASE)

ALE-39, ALQ-157, ALE-39/47, AAR-47

- Cover all the basics of the systems to include programming
- Conduct hands-on training operational and troubleshooting
- Match expendables against the threat
- Develop plans to maximize ASE to defeat the planned threat (expendable cocktails)

5. Teach tactical formation maneuvering (TACFORM) classes

6. Teach terrain flight (TERF)

7. Teach Ps-EM

8. Teach XM-218 employment (pilots as well as crew chiefs)

9. Fly TERF, TACFORM, and TACFORM at TERF altitudes

10. Teach Basic RADAR Principles

- RADAR Horizons, RADAR Resolution Cell, RADAR Terrain Masking (RTM) Predictions

11 Teach Electronic Warfare Classes

12. Fly the Electronic Warfare T&R syllabus flights

13. Teach the Defensive Measures Course, conduct a DM walk-through (non-fly day) - all aircrew

14. Fly the DM Syllabus (Ground Threat Reaction, Rotary Wing, and Fixed Wing)

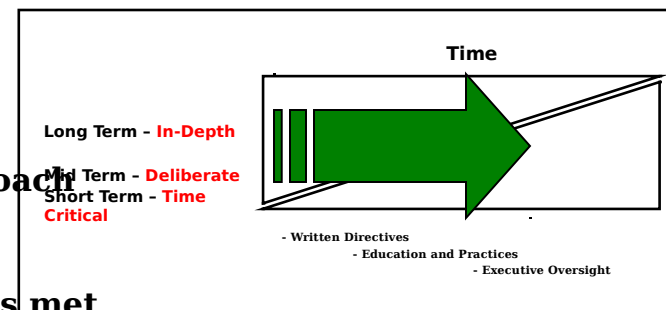
15. Fly tactical flights incorporating "surprise encounters" with these types of threats

16. Debrief the training plan re-evaluate strengths and weaknesses, and schedule refresher training

Mid Term - Deliberate

Written Directives

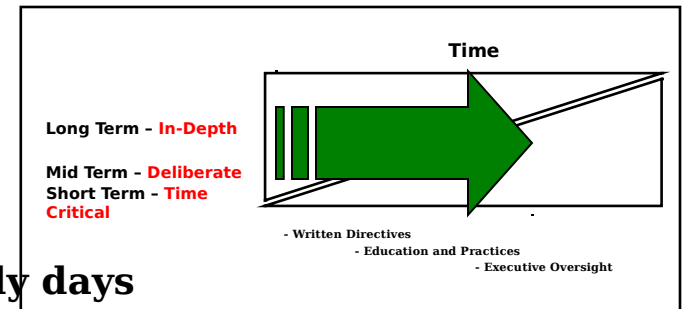
- **Operations Department Aviation Monthly Training Plan in execution**
- **Operations Department Aviation Weekly Training Plan in execution**
- **Mission LOI, FRAG Order, handouts, learning objectives, MSEs**
 - Reviewed for accuracy and completeness
 - Funnel the event
 - Underscore learning objectives
- **T&R Manual requirements met**
 - Standardized Crawl, walk, run - building block approach
 - Proper time and assets scheduled for each T&R "X"
- **Daily flight schedule written**
 - Prerequisites, currency and proficiency requirements met
 - Experience levels prescribed and met
 - Designations and qualifications (HAC to HAC)
 - Individual ability
 - Total flight time considered (I.e. 1000 hours in the cockpit)
 - Crew pairings chosen
 - Limit the total number of hours flown, and the total numbers of events to complete
- **Continue to standardize what is taught (beyond the T&R Manual) for each phase of flight training**
 - E.g. TERF, NVG, Shipboard Ops, Externals, DM, weapons employment, etc.
 - Reading assignments, discussion topics, standardized "dance card" for what is practiced in flight



Mid Term - Deliberate

Education and Practices

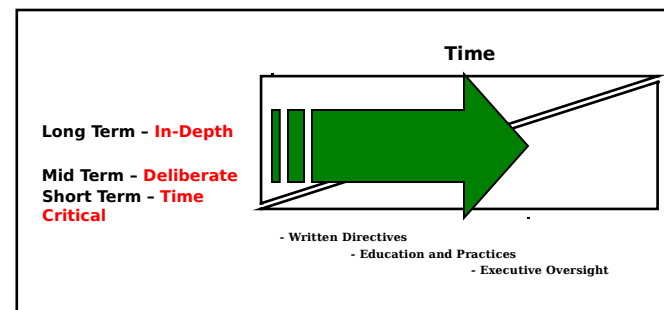
- **Classroom instruction focusing more closely on the mission at hand**
 - External Operations
 - Shipboard operations
 - Terrain Flight (TERF)
 - Night Vision Goggle (NVG)
 - Weapons employment
 - Close Air Support
 - Low/Med/High Threat Tactics
- **Mission planning demonstrations**
- **Mission planning and briefing executed on non-fly days**
- **Briefing of Serious Incident Reports and Hazard Reports**
- **Pilot mentor program**
- **Pilot on-wing program [first three flights with same instructor pilot]**
- **Maintenance training days MATMEP**
- **BITS/Safety Stand Down events**



Mid Term - Deliberate

Executive Oversight

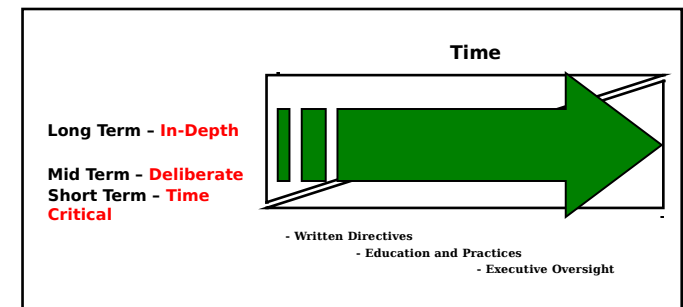
- **Standardization Board**
 - Beyond what is written in the T&R Manual
 - Mission profile specific standardization from planning through execution
- **Risk mitigation decisions met**
- **Manage battle rhythm and operations tempo**
- **SARA database employed accurately**
- **Major evolution committees**
- **Operation specific issues met**
 - Landing Zone (LZ) surveys conducted
 - Training routes certified
 - Airspace coordinated
 - Site safety surveys conducted
 - Extended/Closed field hours and Prior Permission Required (PPRs) coordinated
- **Maximum participation during mission planning and briefing**
 - Weapons and Tactics Instructors (WTIs), Flight Leaders, Instructor Pilots (IPs)
 - Other pilots not assigned to fly the mission are also involved
 - Pilots under training share portions of the flight brief and practice leading Sections/Divisions
- **White Hat and IP Coordination Meetings**
 - All WTIs, Flt Ldrs, and IPs provide a Quality Assurance Check (QA) of the plan
- **MSEL Brief for all pertinent Flt Ldrs and aircraft commanders**
- **Flight Briefs - crystal clear - focus on actions in the objective area**
- **Crew rest, crew day, total flight hour limitations adhered to**
 - Combating acute and chronic fatigue



Short Term - Time Critical

Written Directives

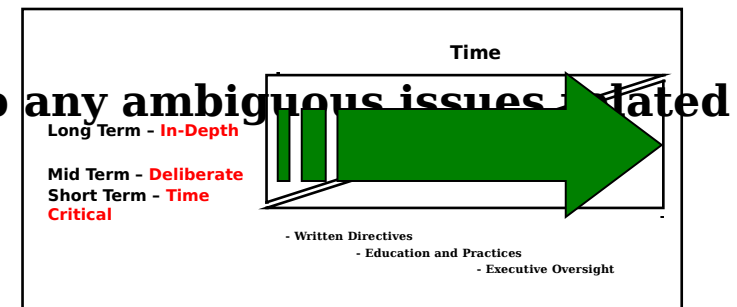
- FRAG Order updated, supported unit contacted for last minute updates
- ORM Worksheet developed, reviewed, and updated
- Daily flight schedule executed - with very few changes



Short Term - Time Critical

Education and Practices

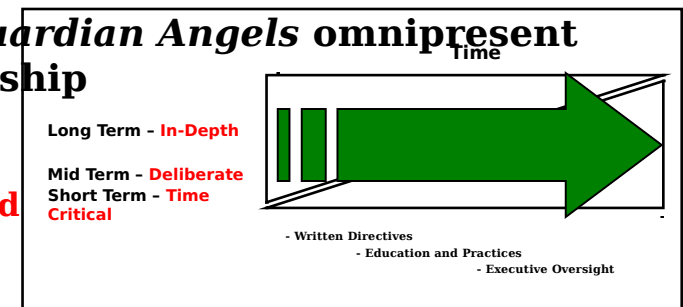
- **Operations Duty Officer (ODO)**
 - Operations Department guidance
 - Local flying area update
 - Notice to Airmen (NOTAMS) researched/briefed
 - Home Field status updates
 - Maintenance liaison
 - Primary Flight Control (PriFly) liaison [ship board]
 - Weather update
- **Focused areas during the mission, flight, and cockpit briefs - re-brief's as required**
 - Actions in the objective area
- ***White Hat* meeting to ensure each IP has correctly identified the risks and developed an adequate plan to mitigate them**
- **Reference directive publications to clear up any ambiguous issues related to the conduct of the mission**



Short Term - Time Critical

Executive Oversight

- Rehearsal of mission brief
- Mission brief conducted
- Objective area walk-through or “sand table exercise”
- *White Hat* meeting
- Scrutinize all “last minute” schedule changes
- Fly the mission exactly as planned and briefed
 - In flight decisions are expected when foreseen or unforeseen events take place
 - Zero tolerance for last minute creativity and non-briefed maneuvers
- Fly the NATOPs numbers - all pilots must be very good at the basics
- Limit the number of missions a crew can “flex” to
- Limit the number of times a crew can enter an objective area
- Require objective area updates and hand-overs between aircraft
- Spread load cockpit workloads amongst the flight members
- Emplace liaison officers on the deck as appropriate for landing in any non-standard LZ
- WTIIs and Senior Flt Ldrs lead the flights with *Guardian Angels* omnipresent
- CO, XO, DoSS site visits - visible hands on leadership
- Anyone can call “King’s X”
 - If it doesn’t look right, feel right, or smell right; call “terminate” or “knock it off”, stop the show and sort it out



That is how we conduct Institutional in HMM-365(Rein)

**Department Heads and Detachment
OICs were
given this brief during our back in the
saddle last
January. Now it is your turn to
familiarize, learn,
and execute this process in your daily
activities**

Areas to Improve

- **Mentorship of Captains and NCOs**
 - Zero second tour Captains
 - Not enough Staff Sergeants
 - Increased leadership, supervision, mentorship and management by Majors and Senior Staff NCOs is the only way to make up for this shortfall
- **Refine the METL we must be prepared to execute** - ensure our progressive training plan prepares us for these missions
 - Re-evaluate and cross-reference the deployment training and contingency/combat plans
 - Flesh out the details in writing
 - Execute the plan!
- **Come up with ways to strengthen the institutional ORM captured in this plan**
 - Use the vehicles that already exist, continue refinement of our day to day practices
 - Education and oversight must occur at every level
 - Step up your level of preparation and supervision and oversight
- **Continue to espouse the CO's Safety and Operational Philosophies**
 - Higher directives are the answer key
 - Education is the vehicle
 - Communication is the linkage

‘Operationalizing’ Safety

- **Knowledge base**
- **Attention to detail**
- **Thorough and progressive training**
- **100% adherence to standards**
- **Fidelity and accountability**
- **Wargaming and oversight**
- **Authority to use the “King’s X” - if it doesn’t look right, feel right, smell right stop the show and sort it out**

ORM = Combat Safety

- **A well trained unit**
- **Pilots that are very good at the basics**
- **The employment of solid aircraft and equipment**
- **Thorough mission planners good at planning**
- **The reliance on simple effective tactics**
- **Continuous threat awareness [all threats]**
- **Disciplined execution - aggressive, but well thought out**
 - **Incorporating surprise, deception, daring, and flexibility**

What I expect...

- **Display professionalism in every situation**
- **Know, abide and enforce all established rules and procedures**
- **Actively participate in efforts to identify and eliminate hazards**
- **Recognize and respect your own limitations**

***Knowledge is the basis for professional
mature judgment and moral courage
are required for its practice***

What I mandate...

- **Thorough mission analysis**
- **Detailed Planning**
- **Employment of sound tactics**
- **Clear and concise briefing**
- **Professional execution**
- **Timely and pertinent debriefing**

Disciplined Warfighting

***This process is continuous and applies
equally to all members of the flying
community without regard for rank,
experience, or crew position***

Aircraft Knowledge - Cold

- **NATOPS, T&R Manual, ANTTTPs, SOPs, etc.**



09/11/16

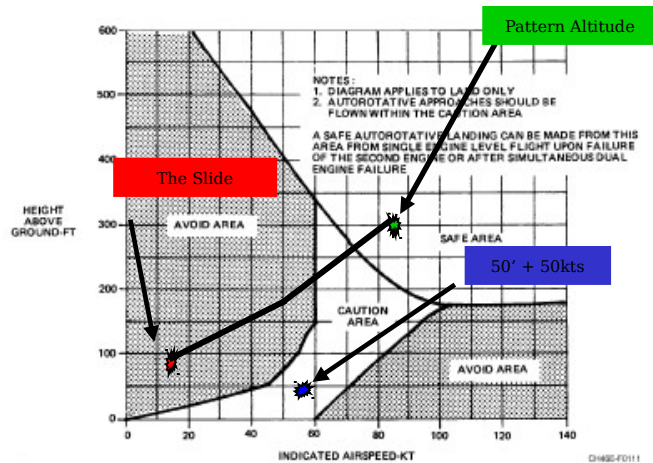
Accurate Load Computations

- For the atmospheric conditions and aircraft configurations you intend to operate in - update in flight as required

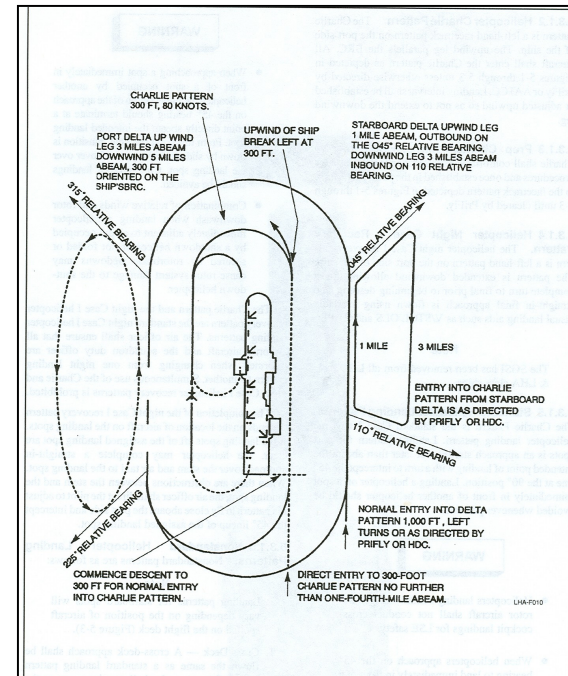
- Accuracy of weight estimates
- Power available
- Power required (HIGE/HOGE)
- Single engine airspeeds

Date: 12/29/2005	Event#	BuNo. 154010	Modex: 13
Crew	BARR /		
	Takeoff Point	Destination	
Temperature	23	20	
Pressure Altitude	4091	455	
Density Altitude	5936	1146	
Head Wind Magnitude	0	0	
Basic Weight	16679	16679	
Crew Weight	900	900	
Mission Equipment Weight	300	300	
Operating Weight	17879	17879	
Fuel Weight	3200	3200	
Total Aircraft Weight	21079	21079	
Payload	0	0	
Mission Weight	21079	21079	
HIGE/HOGE			
Maximum Gross Weight	24300 / 22923	24300 / 24102	
Total Aircraft Weight	21079 / 21079	21079 / 21079	
Allowable Load (Payload)	3221 / 1844	3221 / 3023	
Torque Available			
(SE normal/military)	95 / 104	116 / 124	
(DE normal/military)	100 / 104	116 / 124	
Mission Torque Required at HIGE/HOGE	77 / 88	74 / 85	
Torque Required at Maximum Gross Weight HIGE/HOGE	91 / 98	88 / 100	
Mission Weight Best Range/Endurance	116 / 68	123 / 71	
Minimum/Maximum Single-Engine Airspeed	NoCalc / NoCalc	30 / 97	
Best Single-Engine Airspeed	NoCalc	66	
Maximum Single-Engine Weight	20605	24300	

Fly the Numbers



The height-velocity curve is sometimes referred to as the **dead man's curve** by helicopter pilots, as operation outside the safe area of the chart can be fatal in the event of a power failure.



Plan for Success

Solid Basics

- **Attention to detail**
- **Simple plan**
- **Honor the threats**

“What you plan may not be what you fly!”

The
Actual
Ground Track

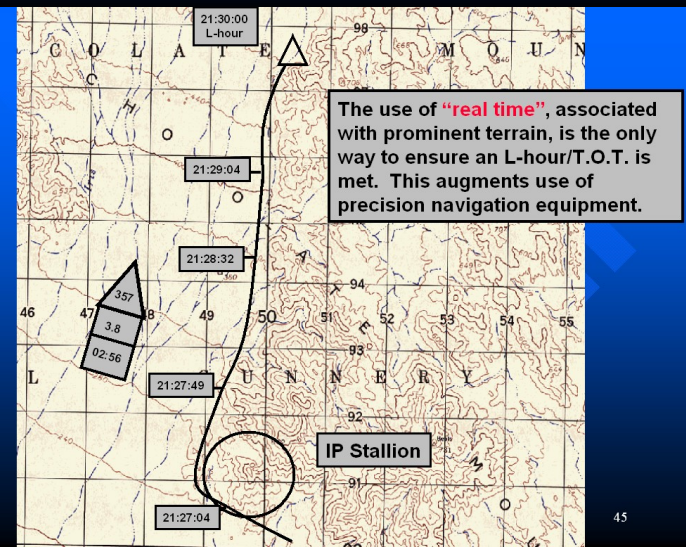
The
“Average”
Planned Route

Consider the Threat

- Plan SEAD and routing accordingly



29



45

Asset Integration/De- confliction

In General...

- **Must have at least 2 of 3**
 1. Altitude Separation
 2. Geographic Separation
 3. Time Separation
- **Plan for multiple routes**
Ingress/Egress/Bingo profile
- **Don't over fly the same terrain repeatedly - remain unpredictable**
- **FAC/FAC(A) control the objective areas - positive communication is required for entry**

FW Attack $\geq 1,500'$ - $\leq 15,000'$

MCA $\geq 2,500'$ - ≤ 3

RW Attack $> 400'$ - $< 2,200'$

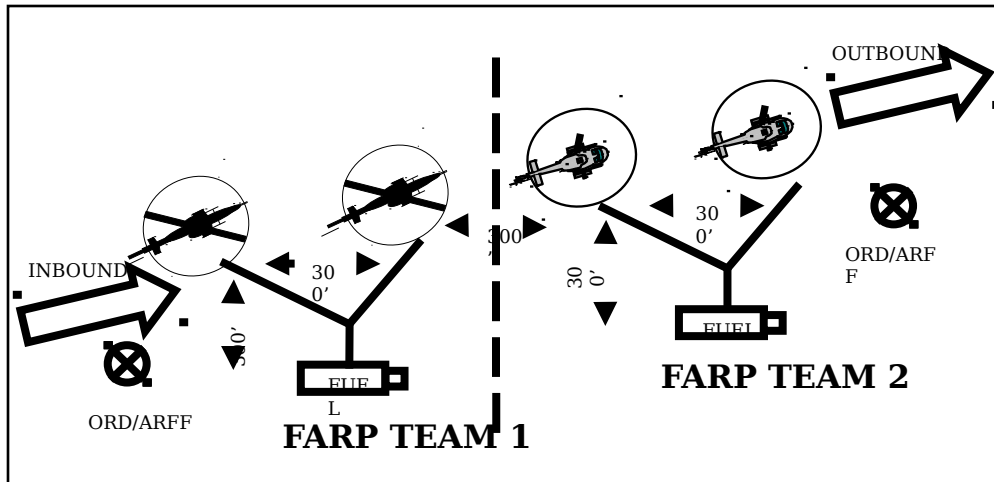
Assaults $\leq 300'$

- **Utilize Fire Support Coordination Measures**
- **Solid target area geometry**
- **Plan for C²**

FARP Operations

- Treated as another Objective Area

- TAFDS, RGR, TBFDS



Efficient Time Management

Sample R2P2 Time Line

Parallel and Concurrent Planning

Mission
Planners
Assigned/
Ready

Receive
Mission

1415
1715

Mission
Analysis

COA
Brief

1455

COE Brief

1530

AMC/HUC/AFL/EFL prepare brief

1515
1815

Rehearsal
Brief

Smart Pack
products due

1615

Conf.
Brief

Briefing
Space
setup

Briefing and
Smart Pack
Roughs
products due

2230 L-hour

09/11/16

Solid Fire Support Plan

UNIT/PHASE	LPD-PZ	PZ OWL	PZ-BLUEJ AY	PZ TO CARDINAL	L-HR-L+1	BP DEF
A Co		PriorityFW/RW CAS/ARTY				PRI FW/RW CAS ARTY/MORT
FAC (A)					PRI FW/RW CAS ARTY/MORT	
EFL	PRI FW/RW ARTY		PRI FW/RW ARTY	PRI FW/RW ARTY/MORT		
ARTY		PRI TGT PR 1001				
81s				PRI TGT PR 1001		
FW	2XAV-30MIN STRIP					
			2X AV-8	2XAV-8		
RW	RGR	OWL	2XAH	2XAH	2XAH	30 MIN STRIP AT FOB

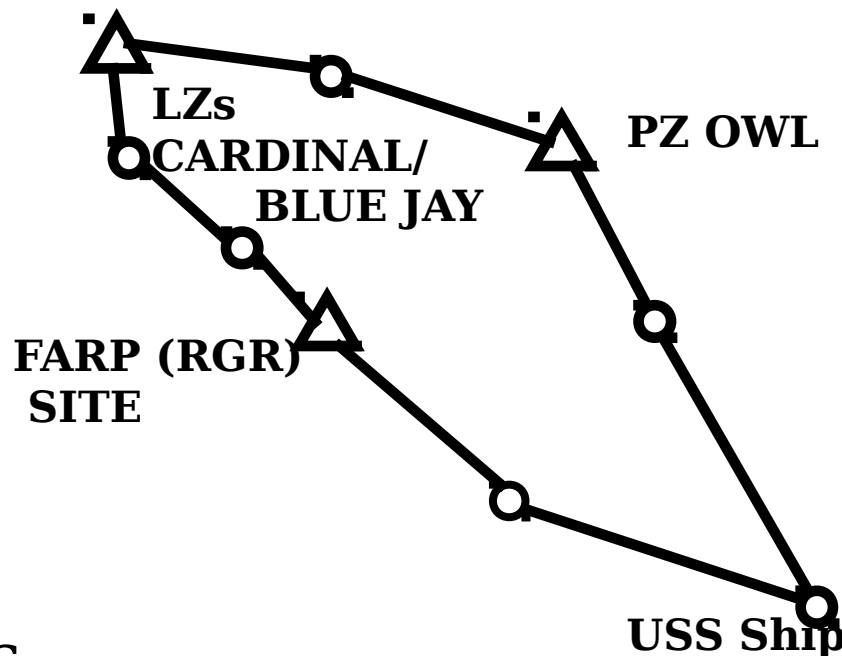
Similar methodology applies to other specified or i.e. CASEVAC, TRAP, etc.

Assets

- Accurate HEALT and

HWSAT

WAVE	HELO UNIT AND FLT NO.	NO MODEL A/C	FROM CARRIER "ORIGIN"	TO REPORT "LOAD"	TIME LOAD	TIME LAUNCH	TIME LAND	DEST. LZ	LS	TRROP UNIT EQUIPMENT AND SERIAL
1	METAL	2 CH-53E	LHA	LPD	2030	2045	2115	PZ OWL		DET, WPNS CO SERIAL 201, 202
				PZOWL	2115	2130	2200	BLUE JAY		3RD PLT(-), CO A, DET WPNS CO
										107/201, 108/202
2	RAGE	6 CH-46E	LHA	PZ OWL	2145	2200	2230	CARDINAL		CO A (-) SERIALS 101-106



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WAVE	HELITEAM FLIGHT SERIAL	TROOP UNIT	NO.	SUPPLIES & EQUIPMENT		WEIGHT	
					PERS	EQUIP	TOTAL
2	101	PlatCmdr, 1stPlat, Co A	1	Normal Combat	220		220
		Radio Operator	1	PRC-119	220	25	245
		1stSqd, 1stPlat, Co A	10	Normal Combat	2200		2200
		1stTm, 1stSqd, Engr Plat	3	Anti-personnel/tank mines	660	200	860
			15				3525
	102	CO, Co A	1	Normal Combat	220		220
		CO Radio Operator	2	2X PRC-119	440	50	490
		FAC Tm #1	3	1XPRC-119/1XPRC-113/1XPRC-104	660	75	735
		2nd Sqd, 1stPlat, Co A	9	Normal Combat	1980		1980
			15				3425
	103	PlatSgt, 1stPlat, Co A	1	PRC-113	220	25	245
		3rd Sqd, 1stPlat, Co A	11	Normal Combat	2640		2420
		3rd Tm, 1stSqd, Engr Plat	3	Anti-personnel /tank mines	660	200	860
			15				3525
	104	PlatCmdr, 2nd Plat, Co A	1	Normal Combat	220		220
		Radio Operator	1	PRC-119	220	25	245
		1stSquad, 2nd Plat, Co A	10	Normal Combat	2200		2200
		1stTm, 1stSqd, MG sect	3	1 M240G machine gun	660	50	710
			15				3475
	105	2nd Sqd, 2nd Plat, Co A	10	Normal Combat	2200		2200
		2nd Tm, 1stSqd, MG sect	3	1 M240G machine gun	660	50	710
		1st Tm AsltSect, Co A	2	1 SMAW	440	25	465
			15				3375
	106	PlatSgt, 2nd Plat, Co A	1	PRC-119	220	25	245
		3rd Sqd, 2nd Plat, Co A	12	Normal Combat	2640		2640
	09/11/16	2nd Tm, AsltSect, Co A	2	1 SMAW	220	535	245
			15				3130

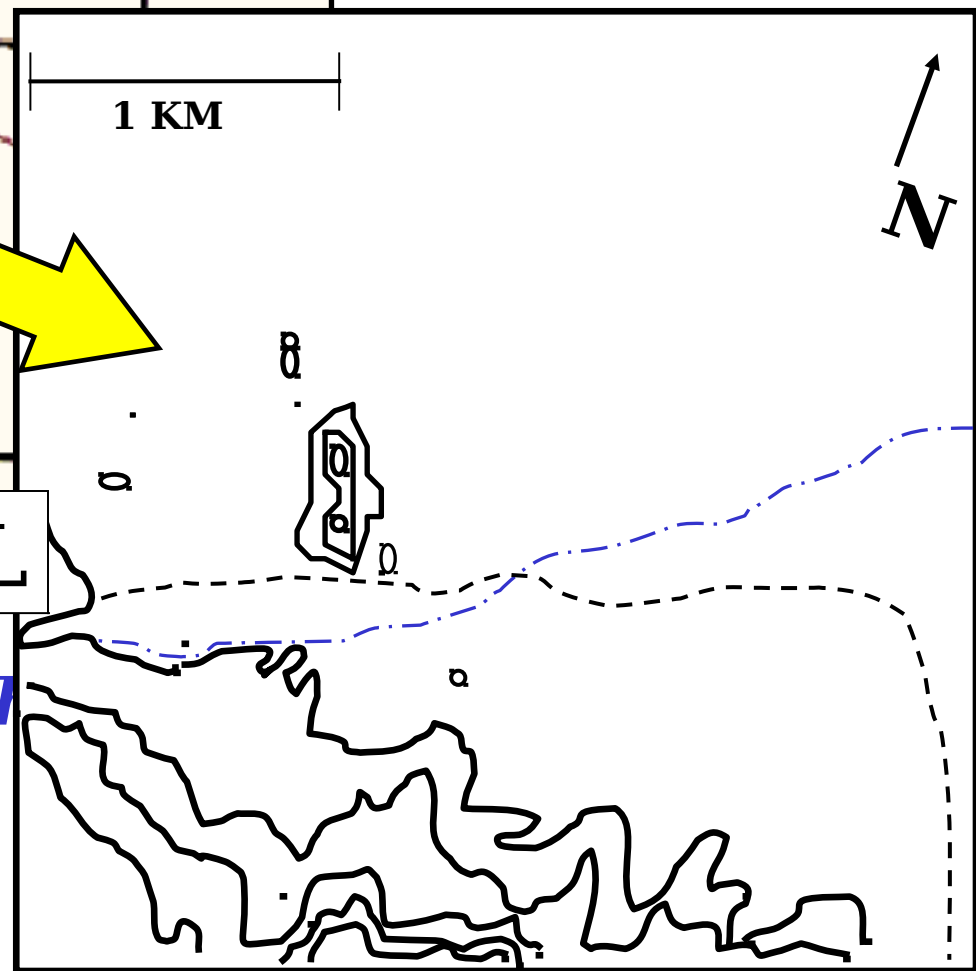
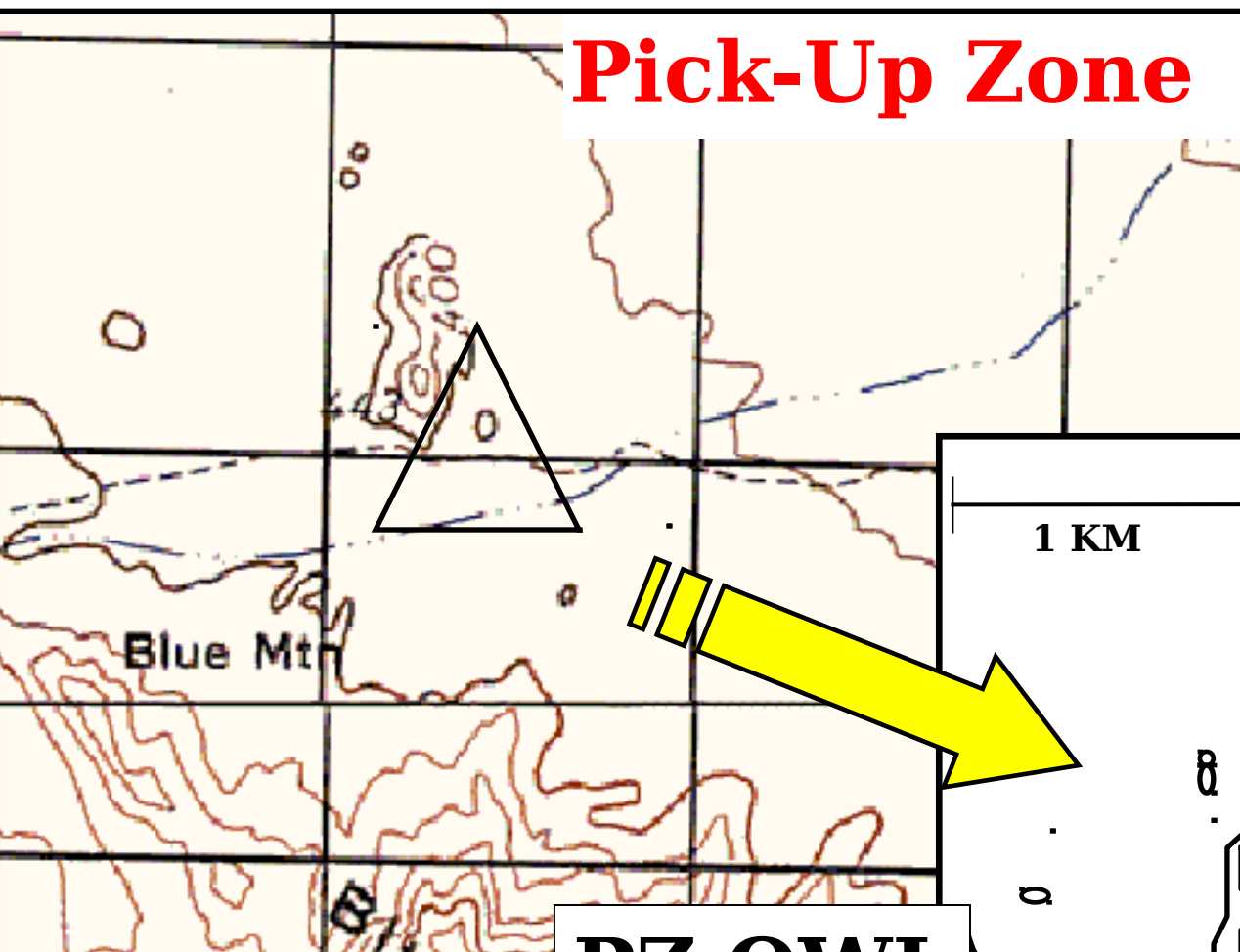
Flexible Load Plans

- Lift Matrix

A/C	(0) CH-46	(1) CH-46	(2) CH-46	(3) CH-46	(4) CH-46	(5) CH-46	(6) CH-46	(7) CH-46	(8) CH-46
(0) CH-53	0	12	24	36	48	60	72	84	96
(1) CH-53	24	36	48	60	72	84	96	108	120
(2) CH-53	48	60	72	84	96	108	120	132	144
(3) CH-53	72	84	96	108	120	132	144	156	168
(4) CH-53	96	108	120	132	144	156	168	180	192

The Lift Matrix is a simple and effective tool used in conce the HEALT and HWSAT to aid decision the process when a straggle is required

Pick-Up Zone - Attention to
- Treated as
Objective



PZ OWL

*The fight won't be won /
but it can be lost here.*

09/11/16

PZ OWL



CO A(-) AA

3rd Plt AA

107

108

PZ Control

ITG

Far recognition

IR Strobes

Near Recognition

Chemlights

Orange - 53Es

Red - 46Es

PZ Control

UHF/VHF

A4N 136.1 (P)

63.80 (A)

Helmets have 'glint tape'

No indirect fire established in PZ

101

102

103

104

105

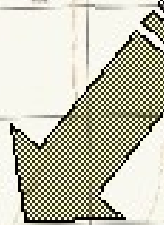
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IP CHEVY

Precisely integrated Objective Areas



EGRESS

ENEMY A
OF ADVA

EGRESS/WAVE OFF

LZ CARD
12S TM 90

PR 002

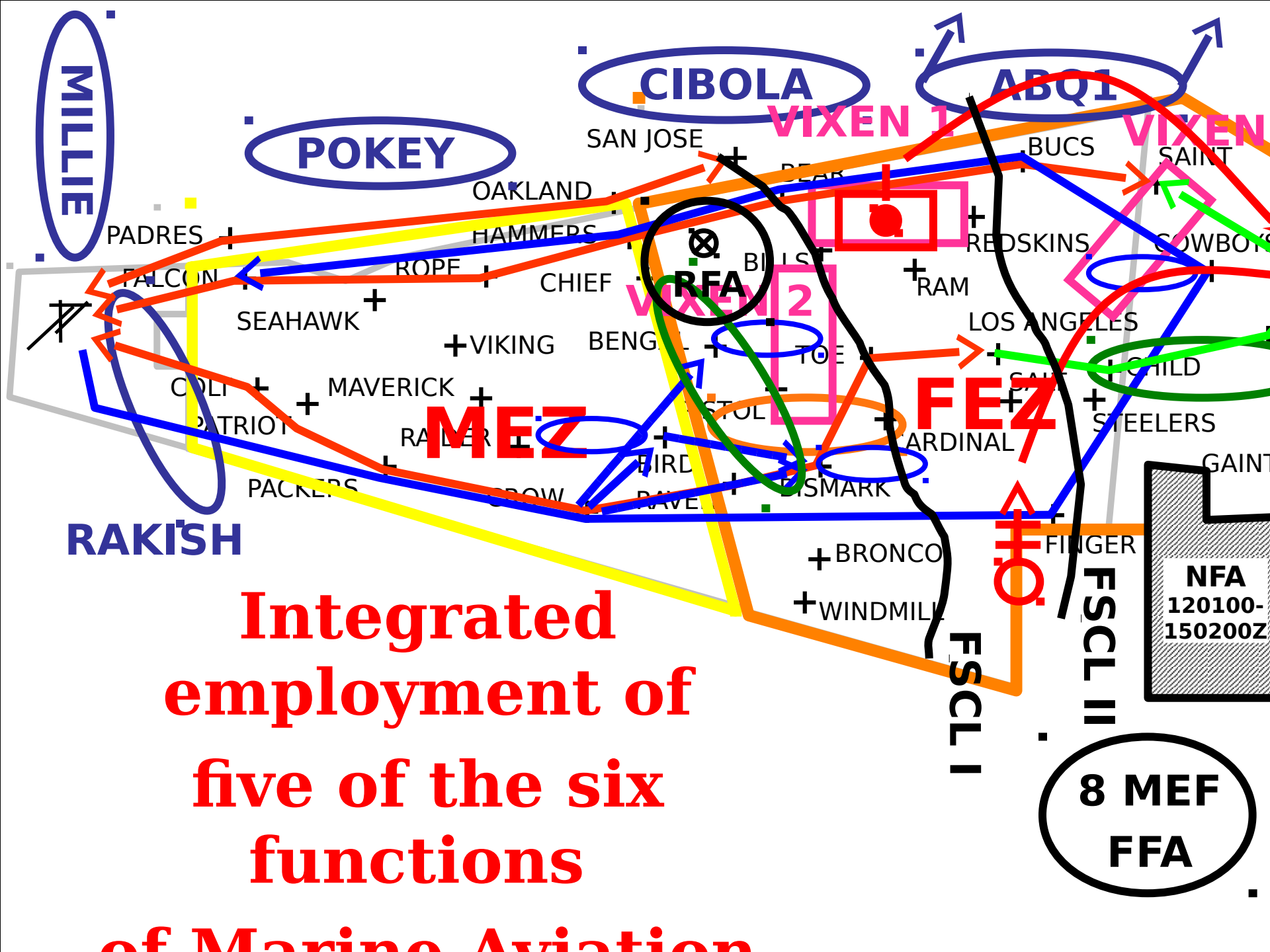
BP VIPER

LZ BLUEJAY
12S TM 903 004

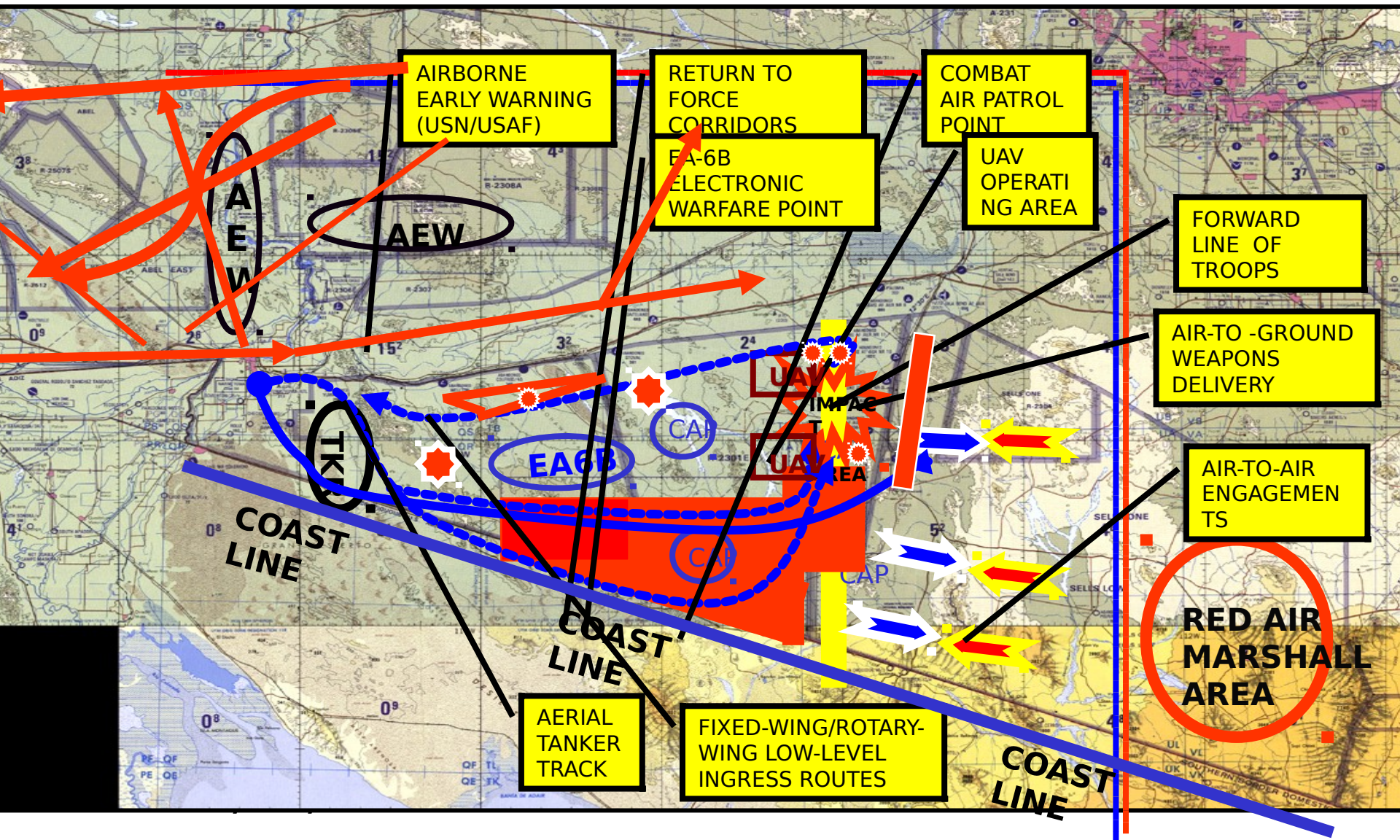
DALLAS



AOF (010)



Under the Single Battle Conce



Other issues related to mission success...

“Quality, efficient, professional, Safe Maintenance is job one”

- **Inspections**
 - MALS-29
 - LogMat
 - AMMT
- **We put safe aircraft on the flight schedule -
*PERIOD***

[Empirically] “HMM-365 Maintenance is in the top 2% of all 36 Squadrons in Second Marine Aircraft Wing”

[Anecdotal] “The Blue Knights have the best Maintenance

Department we’ve seen in the last 18 months”

Other outside inspections

- ✓ ☒ Command Safety Assessment/Maintenance Climate Assessment Survey (CSA/MCAS)
- ☐ Culture Workshop
- ☐ Naval Safety Center
- ✓ ☒ Safety Survey
- ☐ Equal Opportunity Survey

A+

Our Squadron has a very healthy and safe climate

Within the Squadron

- **HMM-365(Rein) DSS**
 - Hazard Detection
 - Hazard Elimination
 - Safety education and awareness
 - Manage a safety program which identifies, reports, and corrects hazards
 - Command Climate
 - Command Safety Goals
- **HMM-365(Rein) QA**
 - Manage maintenance programs
 - Hazard Detection
 - Hazard Elimination
 - Safety education and awareness
- ~~You...~~

We are doing things right!

- **Our Squadron**

- Well trained unit
- Very good at the basics
- Solid equipment and aircraft
- Good planners and planning
- Simple effective tactics
- Threat awareness
- Disciplined execution - aggressive, but well thought out

- **Our Command Climate**

- Trust
- Integrity
- Accountability
- Leadership
- Communication

Disciplined Warfighting

Why the ACE exists...

***In general, we support the MAGTF;
specifically***

***We support the Ground Combat
Element,***

We train and prepare for war,

We fight and we win,

***We return home victorious - and with
honor!***

Parting Thoughts...

Make a difference everyday

- Lead, mentor, and take charge**
- Lead Marines the way you'd want to be led - the way they deserve to be led**

Trust your conscience - your “gut feeling”

We are our brother's keeper

Keep up the great work!

“Safety is a one-day-at-a-time, day-after-day struggle in a war that can never be won. All we can do is to try to win each battle, each day, everyday and pass the legacy on to our replacements. A safety record is only good at the close of business yesterday. One lost life or aircraft, and all those years mean nothing.”

MajGen Stalder